

5 Claims:

1. An oil-hydraulic vehicle comprising:
an oil-hydraulic pump driven by an engine; and
a means which makes use of the hydraulic oil fed from the oil-hydraulic pump to drive at least
one wheel,

10 the means for driving said at least one wheel including:

an oil-hydraulic motor to drive said at least one wheel; and
a means for controlling the rotational frequency of the oil-hydraulic motor,

the oil-hydraulic motor including:

an output shaft on which said at least one wheel is mounted; and

15 a plurality of oil chambers, each oil chamber containing (i) a driving cogwheel which is
mounted on, and drives, the output shaft and (ii) a driven cogwheel which engages with the
driving cogwheel

the means for controlling the rotational frequency of the oil-hydraulic motor including:

a housing with a circular rotor chamber in it; and

20 a rotor fitted in the circular rotor chamber for free rotation,

an inlet port being made in the housing to let the hydraulic oil fed from the oil-hydraulic pump into
the rotor chamber,

outlets of the same number as the oil chambers being made in the housing and arranged in the
directions of turn of the rotor, each outlet connecting with different one of the oil chambers,

25 a feed channel being made in the rotor to connect the inlet port selectively to one of the outlets.

2. The oil-hydraulic vehicle according to claim 1, wherein a one-way clutch is provided between
the output shaft and each driving cogwheel to connect the output shaft and said driving cogwheel
when the rotational speed of said driving cogwheel is higher than the rotational speed of the output
shaft and disconnect the output shaft and said driving cogwheel when the rotational speed of said
30 driving cogwheel is lower than the rotational speed of the output shaft.

3. The oil-hydraulic vehicle according to claim 1 or 2, wherein (i) made in the housing is an
inlet (hereinafter "bypass inlet") which connects with a hydraulic-oil outlet of the oil-hydraulic
motor through a bypass and (ii) made in the rotor is a bypass connection to connect the bypass inlet
to the other outlets than an outlet which is connected with the inlet port through the feed channel.

35